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New records of birds from the island of Panay, Philippines

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Received 13 January 2000

Dickinson *et al.* (1991) summarized the ornithological history of the island of Panay in the central Philippines and included all known published records of birds from there prior to 1990. Although Sonnerat (1776) first collected on the island in 1771 or 1772, more than a century passed before major collections were made by the Steere Expeditions in December 1874 (Sharpe 1876, 1877) and January 1888 (Steere 1890), and by the Menage Expedition (Bourns and Worcester 1894) in November 1890. Until recently, these expeditions formed the foundation of ornithological knowledge of the island.

During the early part of the 20th century, naturalists neglected Panay, possibly because the lowland forests had already been extensively denuded and the mountain range running along the west coast was not easily accessible. Also, they may have felt the mountains not sufficiently high (the highest peak, Mt Madja-as is 2,117 m) nor extensive to support an unique montane fauna. Simply, the likelihood of finding "ornithological novelties" on the island seemed to be very low.

Fortunately, in February and March 1987, R. Cox and Sison set out to survey the remaining forests of the western mountain range for the endangered Visayan Spotted Deer *Cervus alfredi*. They focused on Mt Baloy (1,910 m), which lies at the junction of the provinces of Antique, Iloilo and Capiz. During this survey, Sison collected 77 bird specimens as well as several hundred mammals, reptiles and amphibians. Among the specimens were a number of new records for Panay, as well as an unidentified babbler and an unidentified large rodent which have since been described as new

species, the Panay Striped-Babbler *Stachyris latistriata* (Gonzales & Kennedy 1990) and the Panay Cloudrunner *Crateromys heaneyi* (Gonzales & Kennedy 1996).

Prompted by the important discoveries of the 1987 survey, Gonzales and Kennedy formed the National Museum of the Philippines/Cincinnati Museum of Natural History (NMP/CMNH) Philippine Biodiversity Inventory (PBI). In September and October 1989, the PBI team conducted a new survey of Mt Baloy. Later in April and May 1992, the PBI team surveyed Mt Madja-as, about 27.5 km north-northwest of Mt Baloy and in the same mountain range.

Here we report 37 new records of birds for Panay obtained during the 1987, 1989 and 1992 surveys, as well as incidental surveys conducted in other areas of Panay between 1987 and 1993. One of these records is from previously unreported specimens in the Delaware Museum of Natural History (DMNH).

Location data

Below, we summarize the key areas surveyed during our work (see Fig. 1). In the species accounts that follow, we will refer to the abbreviated title for each location.

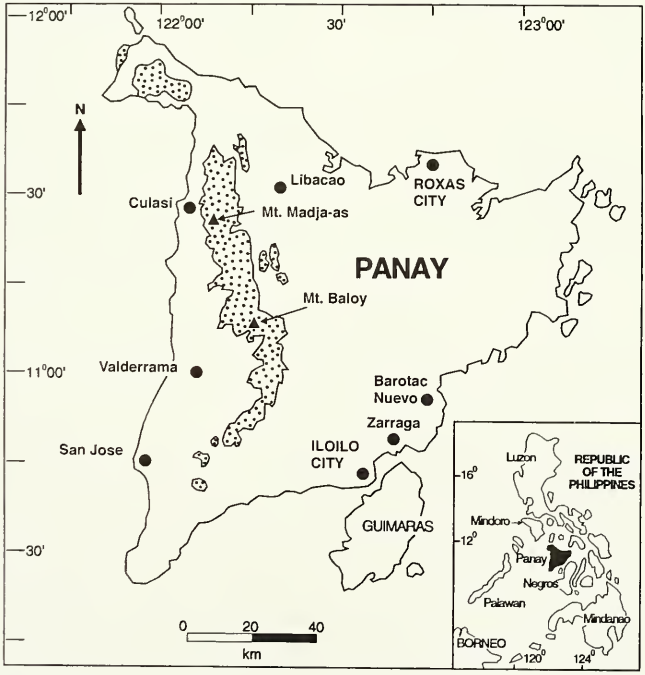

Figure 1. Map of Panay, Philippines showing the location of municipalities and mountains mentioned in the text and the distribution of the closed and open canopy forest remaining on the island (stippled).

Mt Baloy, 1987 - Mt Baloy, Iloilo Province 900 to 1,200 m elevation, mid-mountain forest; 12 February to 7 March 1987.

Mt Baloy, Camp 1 - 11°06'N, 122°12'E, along the Cadian River, Sitio Tinogyan, Barangay San Agustin, Municipality of Valderrama, Antique Province, 160 to 210 m, mixed grassland and remnant patches of lowland forest; 1 to 5 October 1989.

Mt Baloy, Camp 2 - 11°08'N, 122°14'E, 1.1 km south southwest of the peak of Mt Baloy, Barangay San Agustin, Municipality of Valderrama, Antique Province, 1,430 to 1,540 m, montane mossy forest; 7 to 14 October 1989.

Mt Baloy, Camp 3 - 11°07'N, 122°13'E, 4.2 km southwest of the peak of Mt Baloy, Barangay San Agustin, Municipality of Valderrama, Antique Province, 770 to 975 m, mid-mountain forest and grasslands mixed with remnant patches of forest; 14 to 17 October 1989.

Hanggud Tubig, Mt Madja-as - 11°23'N, 122°09'E, west face of Mt Madja-as, locally known as Hanggud Tubig, Barangay Alojipan, Municipality of Culasi, Antique Province, 990 to 1,350 m, mid-mountain to montane mossy forest; 4 to 13 April 1992.

Nalanaw, Mt Madja-as - 11°24'N, 122°09'E, northwest ridge approach to Mt Madja-as, locally known as Nalanaw, Municipality of Libacao, Aklan Province, 1,330 to 1,570 m, montane mossy forest with upper level dominated by palm and *Pandanus* sp.; 19 to 26 April 1992.

Alojipan, Department of the Environment and Natural Resources (DENR) Nursery - 11°25'N, 122°07'E, located in the western foothills of Mt Madja-as, Barangay Alojipan, Municipality of Culasi, Antique Province, 60 to 130 m, tree (*Gmelina* sp.) plantation and mixed second growth; 28 April to 2 May 1992.

Barotac Nuevo - Shallow fish ponds near Iloilo State College of Fisheries, Barangay Tiwi, Municipality of Barotac Nuevo, Iloilo Province, near sea level; 28 February 1993.

Species accounts

In the following accounts, records may be sight records or specimen records or a combination of both. We have included sight records only where the species was identified by one or more competent observers at close range with good optical equipment and lighting conditions, and could be identified without question based on size, field marks, habitat and behaviour. Species and number of specimens collected during the NMP/CMNH surveys follow the quidelines outlined in Gratuitous and CITES Permits issued by the Protected Areas and Wildlife Bureau of the Philippine Department of Environment and Natural Resources. For the specimen records, we refer to the museum catalogue number of each specimen when the species is either rare or if only a few specimens were obtained. For more common species, we mention only the museum where the voucher specimens are located. Where possible, we have identified each species to subspecies but it is clear that many of these new records also represent new subspecies that we will describe elsewhere. For the most part, we

have used Dickinson *et al.* (1991) as our source for English and scientific names, and for the former known distribution of the species and subspecies mentioned in this report.

Finally, in the field we recorded the altitude for most specimens obtained. On Mt Madja-as, we established 2 non-contiguous altitudinal transects, 1 at Hanggud Tubig with 50 mist nets and 1 at Nalanaw with 39 nets. Combined, the nets ranged from 988 m to 1,570 m, and overlapped only between 1,330 and 1,350 m. At both sites, all nets were opened for approximately 7 full days. This allowed us to compare the number of specimens captured per mist net (capture/mist net ratio) at different altitudes for the more common species.

GREAT EGRET *Egretta alba modesta*

Kennedy and Ebreo observed 6 on 12 October 1989 along the National Highway foraging in and flying over ricefields a few km north of San Jose, Antique Province near sea level. They identified the birds by comparatively larger size than other white egrets present, the long "kinked" s-shaped neck, large yellow bill and black legs and feet. Other white egrets present in the area were Cattle Egrets *Bubulcus ibis* (40+ individuals), Intermediate Egret *Egretta intermedia* (8), and Little Egret *Egretta garzetta* (8). Great Egrets were previously recorded from Batan, Cebu, Luzon, Mactan, Mindanao, Mindoro, Negros and Palawan.

LITTLE HERON *Butorides striatus amurensis*

Specimen record, 1 female (CMNH 36900) moulting into adult plumage, caught by NMP/CMNH PBI Team in a mist net, 29 April 1992 at 125 m along the Bacong River in the Alojipan DENR Nursery, with ovary measuring 12 x 6 mm and diameter of largest ovum 1.5 mm. We compared this specimen to a specimen (DMNH) of the resident subspecies *carcinophilus* and, based on its longer wing (190 vs 169 mm), culmen (78.4 vs 65.9 mm) and tarsus (52.9 vs 43.9 mm) and greener upperparts, identified it as representing the migrant subspecies *amurensis*, previously known in the Philippines from Calayan, Cebu, Luzon, Mindanao, Mindoro, Negros and Samar. This is the first record of this subspecies from Panay.

ORIENTAL HONEYBUZZARD *Pernis ptilorhynchus philippensis*

Kennedy and Ebreo observed 2 on 13 October at *c.*1,000 m, 1 on 14 October at *c.* 1,500 m, and 1 on 15 October 1989 at *c.* 1,200 m, all on Mt Baloy along the trail linking Camps 1 to 3, soaring at various heights over the mid-mountain and montane mossy forest. They clearly saw the long "chicken-like" neck, long slender wings with translucent windows, long tail and pale rufous underparts of these birds. By the streaking on the breast and pattern of the banding on the tail, they identified at least one of these birds as representing the endemic subspecies *P. p. philippensis* previously recorded from Basilan, Biliran (Kennedy *et al.* in press), Catanduanes, Cebu, Luzon, Mindanao, Mindoro, and Negros, and presumably this race on Leyte and Samar.

BESRA *Accipiter virgatus confusus*
Specimen records 4, all caught in mist nets inside forest by the NMP/CMNH PBI Team: 1 male (NMP 16734) netted 9 October 1989 at 1,530 m in montane mossy forest on Mt Baloy, Camp 2 with partially developed testes (6 x 5 mm); 1 adult male (CMNH 36752) collected 10 April 1992 at 1,137 m in mid-mountain forest at Hanggud Tubig, Mt Madja-as with undeveloped testes; 1 immature female (CMNH 36902) on 28 April 1992 at 95 m at the Alojipan DENR Nursery with ovary measuring 9 x 5 mm and diameter of largest ovum 1.5 mm, suggesting it was beginning to breed; 1 adult male (NMP 18976) on 2 May at 120 m at the Alojipan DENR Nursery with testes slightly enlarged measuring 6 x 3 mm.

Based on the barring of the underparts of the adult males we have identified these birds as representing the Philippine endemic subspecies *A. v. confusus* previously recorded from Catanduanes, Luzon, Mindoro and Negros. Brooks & Dutson (1997) reported an unidentified *Accipiter* from Panay that was probably this species.

CHINESE GOSHAWK *Accipiter soloensis*
Specimen records 2, both moulting into adult plumage, and mist-netted by the NMP/CMNH PBI Team inside the mid-mountain forest at Hanggud Tubig, Mt Madja-as: 1 female (CMNH 36821) on 8 April 1992 at 1,100 m with ovary slightly enlarged measuring 9 x 5 mm; and 1 female (NMP 18896) on 10 April 1992 between 990 and 1,350 m, with ovary slightly enlarged measuring 10 x 5 mm.

This species is a fairly common migrant to the Philippines with records scattered throughout the archipelago.

PEREGRINE FALCON *Falco peregrinus ernesti*
On 28 February 1993, Kennedy and Ebreo saw an immature very dark Peregrine fly low over (10 to 15 m above ground) the fish ponds at Barotac Nuevo. It flew over their heads and maintained speed and altitude flying essentially in a straight line until it disappeared several km away.

They identified this extremely dark individual as a representative of the resident subspecies *F. p. ernesti*, recorded in the Philippines from Calayan in the north to Tawi-Tawi (Hornskov 1996) in the south.

BAILLON'S CRAKE *Porzana pusilla pusilla*
Specimen records 4, all obtained at 5 to 10 m elevation in May 1976 from Zarraga, Iloilo Province: 1 immature female (DMNH 55808); 1 adult female (DMNH 55809); and 2 adult males (DMNH 55810, 55811). From the hand writing on the label they appear to have been collected by Nicandro Icarangal, Sr. Baillon's Crake is considered uncommon in the Philippines with previous records from Dinagat, Luzon, Marinduque, Negros and Palawan.

COMMON REDSHANK *Tringa totanus eurhinus*
Kennedy and Ebreo saw 2 individuals from 25 to 100 m away foraging in and flying over shallow fish ponds at Barotac Nuevo, 28 February 1993 in mid afternoon. They clearly saw key field marks of these winter-plumaged birds including reddish orange legs, straight dark bill with orange red base, white rump and wedge up back, and diagnostic white trailing edge to wing. Several other shorebird species were also in the area (see following accounts) but generally there were not many individuals of any species present.

The Common Redshank is a common migrant to the Philippines with records scattered throughout the archipelago.

MARSH SANDPIPER *Tringa stagnatilis*
On 28 February 1993 in mid afternoon, Kennedy and Ebreo saw 6 individuals from 15 to 100 m away, feeding in and flying over the fish ponds at Barotac Nuevo. The birds foraged in small groups in the shallow water up to their bellies. They identified the birds by their foraging behaviour, slender bills and overall body proportions, white eyebrows and underparts and greyish upperparts. The larger Common Greenshank was nearby for comparison.

Marsh Sandpipers are uncommon migrants to the Philippines with prior records from Cebu, Luzon, Mindanao, Negros, Olango (Anon 1993) and Palawan.

COMMON GREENSHANK *Tringa nebularia*
A single bird in non-breeding plumage was seen foraging and flying from 25 to 100 m away by Kennedy and Ebreo at the fish ponds at Barotac Nuevo on 28 February 1993. The individual was flushed several times to confirm its white rump and wedge going up the back, and its fairly plain, unbarred wings. This species is an uncommon to common migrant to the Philippines with scattered records throughout the islands.

RUDDY TURNSTONE *Arenaria interpres*
Kennedy and Ebreo saw 2 individuals of this distinctive boldly patterned species from 25 to 50 m away foraging at the edge of the fish ponds at Barotac Nuevo in mid afternoon on 28 February 1993. A common migrant with scattered records throughout the Philippines.

LONG-TOED STINT *Calidris subminuta*
A minimum of 8 individuals were observed by Kennedy and Ebreo at the fish ponds at Barotac Nuevo on 28 February 1993. The birds were identified at a distance of about 15 m, close enough to see their distinctive yellowish legs, strongly mottled upperparts and greyish-brown breast bands. Long-toed Stints are common migrants to the Philippines with scattered records throughout, including Palawan.

CURLEW SANDPIPER *Calidris ferruginea*
Kennedy and Ebreo saw 2 individuals in winter plumage, 20 to 50 m away, foraging and flying at the fish ponds at Barotac Nuevo on 28 February 1993. Key field marks noted were long decurved black bill, relatively short black legs, fairly uniform greyish brown upperparts with white rump and narrow white wing bar. An uncommon migrant, Curlew Sandpipers previously have been recorded on Cebu, Luzon, Mindoro, Negros, Olango (Magsalay *et al.* 1989), Palawan and Simunul.

YELLOW-BREASTED FRUIT-DOVE *Ptilinopus occipitalis occipitalis*
Specimen records 2: 1 adult female (NMP 16361) obtained by Sison and Pelayo on Mt Baloy on 17 February 1987; 1 immature female (CMNH 36753) mist-netted on 6 April 1992 by the NMP/CMNH PBI team at 1,044 m at Hanggud Tubig, Mt Madja-as. Considering this species is frequently caught in mist nets and that only 2 specimens were obtained, we suspect that this Philippine endemic is rare or at best uncommon on Panay.

The Yellow-breasted Fruit-Dove, subspecies *P. o. occipitalis*, was previously known from neighbouring Negros, and from major islands north and east of Panay.

REDDISH CUCKOO-DOVE *Macropygia phasianella tenuirostris*
Specimen records 13 (6 CMNH, 7 NMP), all caught in mist nets from 5 to 24 April 1992 at Hanggud Tubig (5 males, 5 females) and Nalanaw (1 male, 2 females) on Mt Madja-as. All specimens were in breeding condition with enlarged gonads, testes ranged from 11 x 6 to 16 x 8 mm, and ovaries from 10 x 6 to 13 x 9 mm all with developing ova. Of the 13 birds, 11 were evenly distributed in mid-mountain forest from 1,075 m to 1,347 m. The remaining 2 were obtained at 1,480 m and 1,525 m. The Reddish Cuckoo-Dove was a common resident on Mt Madja-as but strangely was not recorded on Mt Baloy. The endemic subspecies *M. p. tenuirostris* has been recorded throughout the Philippines, except the northern Babuyan and Batan Islands.

SPOTTED DOVE *Streptopelia chinensis tigrina*
Kennedy and Ebreo saw 5 individuals on 30 September 1989 and 2 on 12 October 1989 as the birds were foraging on the ground in the wide Cadian River floodplains east of Valderrama. They identified the birds by their medium size, long tails with white tips to outer tail feathers, and by the diagnostic broad black collar with white spots. This resident has been expanding its range throughout the Philippines, particularly in cultivated areas (Dickinson *et al.* 1991).

HODGSON'S HAWK-CUCKOO *Cuculus fugax pectoralis*
Specimen record, 1 male (CMNH 36759) mist-netted by the NMP/CMNH PBI Team on 6 April 1992 at 1,042 m in mid-mountain forest at Hanggud Tubig, Mt Madja-as; testes partially enlarged (5.5 x 3 mm). This is the first record of the widely distributed Philippine endemic subspecies *C. f. pectoralis* from Panay, where it appears to be uncommon.

ORIENTAL CUCKOO *Cuculus saturatus horsfieldi*
Specimen records 3, all mist-netted: 1 hepatic female (CMNH 36760) obtained on 8 April 1992 at Hanggud Tubig, Mt Madja-as in mid-mountain forest at 1,115 m; and 2 adult females mist-netted by the NMP/CMNH PBI Team on 28 April (CMNH 36910) at 120 m and 30 April 1992 (NMP 18977) at 90 m, both at the Alojipan DENR Nursery. This widespread migrant to the Philippines appears to be uncommon on Panay.

PHILIPPINE SCOPS-OWL *Otus megalotis nigrorum*
Specimen records 8, all but 1 mist-netted: 1 male (NMP 16310) and 1 female (NMP 16311) caught by Sison and Pelayo on 13 February 1987 at *c.* 1,000 m on Mt Baloy; 1 female (CMNH 34172) collected by NMP/CMNH PBI Team on 17 October 1989 in mid-mountain forest at 950 m on Mt Baloy, Camp 2, with slightly enlarged ovary (9.0 x 4.5 mm) and oviduct, and largest ovum 1 x 1 mm. Remaining birds (3 males, 2 females) were obtained by the NMP/CMNH PBI Team from Mt Madja-as from 10 to 28 April 1992, 4 from Hanggud Tubig at elevations from 1,000 to 1,044 m, and 1 from Alojipan DENR Nursery at 100 m. All Mt Madja-as birds had enlarged gonads, with testes ranging from 10 x 6 to 19 x 12 mm, and ovaries around 11 x 6 mm with enlarged ova and the presence of 3 or 4 corpora lutea.

The subspecies *O. m. nigrorum,* now known from Negros and Panay, may well prove to be a distinct species. The status of this and other subspecies of *Otus megalotis* is currently under study by Miranda and Kennedy, using both morphometric and mitochondrial DNA methods.

PHILIPPINE SWIFTLET *Collocalia mearnsi*
Specimen records 8 (NMP 18942 to 18945, CMNH 36848 to 36851), all obtained by the NMP/CMNH PBI Team from Nalanaw, Mt Madja-as from 19 to 23 April 1992 at altitudes from 1,370 to 1,570 m. Of 6 females, 5 had relatively small ovaries, but one had a developed ovum in the oviduct. Testes of the 2 males were moderately enlarged, measuring 4 x 3 and 4 x 2 mm. Brooks & Dutson (1997) tentatively identified this species on Mt Madja-as in 1994. The specimens reported here, obtained before their sightings, confirm the presence of this Philippine endemic on Panay. Previously, it was known from Bohol, Camiguin Sur, Cebu, Luzon, Mindanao, Mindoro, Negros and Palawan.

ASIAN PALM SWIFT *Cypsiurus balasiensis pallidior*
Kennedy and Ebreo saw *c.* 10 birds, scattered along the National Highway from Iloilo City to Valderrama, Antique Province on 30 September 1989. Each bird was identified by its habit of flying low over coconut plantations or nearby clearings, its small size, long slender wings, long deeply forked tail and dark rump. The subspecies *C. b. pallidior* is endemic to the Philippines, excluding the Palawan Group. On Panay and on the other islands where it has been recorded, it is generally common in the lowlands.

SPOTTED WOOD-KINGFISHER *Actenoides lindsayi moseleyi*
Specimen records 7, all mist-netted in forest or forest patches: 1 (NMP 16315) collected by Sison and Pelayo on 22 February 1987 at *c.*1,000 m on Mt Baloy; 1 male (CMNH 34195) collected 4 October 1989 at 210 m on Mt Baloy, Camp 1; 1 male (NMP 16733) on 16 October 1989 at 975 m from Mt Baloy, Camp 2. Gonads of the October 1989, Mt Baloy birds were small (3 x 1 mm) indicating they were not breeding. The remaining 4 specimens are from Mt Madja-as: 2 males (CMNH 36768, NMP 18906) and 1 female (NMP 18907) collected between 6 and 8 April 1992 from 1,006 to 1,185 m from Hanggud Tubig; and 1 male (CMNH 36913) on 29 April 1992 at 108 m from Alojipan DENR Nursery. All April Mt Madja-as birds had enlarged gonads, testes ranging from 5 x 4 to 6.5 x 5 mm, and ovary 10 x 8 mm with 3 corpora lutea present and diameter of largest ovum 1.5 mm.

We compared the Panay specimens of this Philippine endemic to specimens (FMNH, CMNH) of *A. l. moseleyi* from Negros and found no differences between them that could not be explained by individual variation. This species appears to be uncommon to fairly common on Panay.

FLAME-TEMPLED BABBLER *Stachyris speciosa* subsp.
Specimen records 4, obtained by Sison and Pelayo: 1 male (NMP 16320) with partially enlarged testes collected 25 February 1987 at 1,000 m on Mt Baloy; 1 male (NMP 16364) collected on 9 March 1987 with enlarged testes, 1 male (NMP 16371) with partially enlarged testes, and 1 female (NMP 16370) both collected 10 March 1987 with these 3 specimens from Jamindan, Municipality of Libacao, Aklan Province. This Philippine endemic was formerly only known with certainty from Negros. These Panay records confirm Bourns and Worcester's statement in McGregor (1909-10) that they were "quite confident" that they had seen this species once on Panay.

We have compared Panay and Negros specimens (DMNH, FMNH) and have found some differences between them, but we defer judgement on the taxonomic status of the Panay birds until we have looked at additional specimens from Negros.

WHITE-BROWED SHORTWING *Brachypteryx montana* subsp.
Specimen records 93 (40 NMP, 42 CMNH, 11 not designated). We found this species to be a common resident in the mid-mountain to montane mossy forest of Panay. Between 16 February and 7 March 1987, Sison and Pelayo obtained the first 6 specimens at *c.*1,000 m from Mt Baloy. Only 1 of the 5 males and 1 female they collected had enlarged gonads.

During the NMP/CMNH PBI survey of Mt Baloy from 1 to 17 October 1989, this species was obtained (n=29) only from Camp 2 between 1,430 and 1,530 m but was heard by Kennedy, Gonzales and Ebreo up to the peak of Mt Baloy at 1,910 m. No shortwings were captured at Mt Baloy, Camp 3 that covered altitudes from 770 to 975 m. At Camp 3 the shortwing had apparently been replaced by the behaviourally similar White-browed Shama *Copsychus luzoniensis*, as 6 individuals of this species were captured there. Of 13 males sexed, 7 were in breeding condition with testis size

ranging from 6 x 4 to 7 x 5 mm. The remaining birds had small testes and, in nearly all cases, skull ossification indicated that they were immature. Of 8 females, 4 had developed ovaries ranging from 7 x 4 to 11 x 5 mm.

On the Mt Madja-as survey from 4 to 26 April 1992, we obtained a large series of specimens (n=58) from Hanggud Tubig and Nalanaw. They ranged from 996 to 1,555 m elevation with 37 obtained from 39 mist nets (capture/mist net ratio = 0.95) from 1,350 to 1,570 m, while 17 were obtained from 50 mist nets (capture/mist net ratio = 0.34) from 996 to 1,349 m. Of 25 males sexed, 22 had enlarged testes ranging from 5.5 x 3 to 8 x 5 mm, 2 had slightly enlarged testes 2 x 2 to 3 x 2 mm, and 1, a juvenile, had small testes 1 x 1 mm. Of 18 females sexed, 16 had enlarged ovaries ranging from 6 x 3 to 10 x 6 mm, and of these one had a shelled egg in its oviduct. The remaining 2 females were juveniles.

The White-browed Shortwing is widespread and common in the Philippines and 7 endemic subspecies are currently known. The Panay population is also common but we have yet to determine whether it is an undescribed subspecies or whether it belongs with neighboring *B. m. brunneiceps* from Negros, or with some other subspecies.

SIBERIAN RUBYTHROAT *Luscinia calliope*

Specimen record, 1 female (CMNH 36864) mist-netted by the NMP/CMNH PBI Team on 22 April 1992 at 1,330 m in montane forest at Nalanaw, Mt Madja-as. This individual contained heavy fat. This migrant appears to be a rare winter visitor to Panay, as it is throughout the Philippines.

SUNDA GROUND-THRUSH *Zoothera andromedae*

Specimen records 5, all obtained from Camp 2 on Mt Baloy at 1,530 m in montane mossy forest, 7 to 8 October 1989, including 1 adult female (NMP 16726) with enlarged ovary measuring 11 x 7 mm, 3 nestlings (CMNH 34250 to 34252) a few days old, and 1 juvenile female (CMNH 34249) with undeveloped ovary (6 x 4 mm) and unossified skull. The nest containing the nestlings and from which the adult female was captured was bowl-shaped and located 4.6 m from the ground in the fork of a medium-sized tree; the diameter of the main trunk below the nest was 17.6 cm. The nest had the following measurements in mm: overall length 210, width 185, and height 85; nest bowl length 125, width 70 and depth 50. It was made of mosses and rootlets and the bowl was lined with hairlike rootlets. This is the first record of a nest of this species from the Philippines. Also, this may well be the first description of the nest of this species, as we have not been able to locate a description elsewhere.

This secretive montane mossy forest bird has been recorded in the Philippines previously only from Luzon, Mindanao, Mindoro and Negros.

ISLAND THRUSH *Turdus poliocephalus* subsp.

Specimen records 28 (12 NMP, 14 CMNH, 2 not designated) all mist-netted in mid-mountain to montane mossy forest on Mt Baloy and Mt Madja-as. We captured 5

specimens at Camp 2 on Mt Baloy between 7 and 13 October 1989 at elevations ranging from 1,530 to 1,540 m. Kennedy and Ebreo saw many individuals on the higher slopes of Mt Baloy from Camp 2 to the peak at 1,910 m. We did not see or obtain any specimens at Camp 3, which apparently was below the altitudinal range of this species on Mt Baloy. Of 4 specimens sexed, 3 were females all with relatively undeveloped ovaries measuring from 9 x 4 to 11 x 5 mm, and 1 was a male with relatively small testes measuring 3 x 3 mm.

On Mt Madja-as, specimens were collected at both Hanggud Tubig (n=4) and Nalanaw (n=18) from 6 to 25 April. Only 4 specimens were captured in 66 mist nets (capture/mist net ratio = 0.06) below 1,400 m, 1 at 1,100 m, 1 at 1,223 m, 1 at 1,330 m, and 1 at 1,344 m. Of the 19 remaining specimens, 18 were caught using 23 mist nets (capture/mist net ratio = 0.78) above 1,400 m, indicating their strong preference for montane mossy forest.

The population was breeding during the census period with 10 males showing enlarged testes ranging from 10 x 7.5 to 15 x 10 mm, and 8 females having enlarged ova or corpora lutea present in their ovaries, which ranged from 9.5 x 6 to 25 x 15 mm. One female had 3 eggs of various stages of development in her oviduct, while 1 male and 1 female, both juveniles, had small gonads.

The Island Thrush is found commonly in montane forest from Luzon to Mindanao, but it has not been found on Palawan. Seven endemic subspecies have been described. The Panay population clearly represents a new subspecies that we shall describe elsewhere.

EYEBROWED THRUSH *Turdus obscurus*

Specimen records, 3 males (NMP 18925, CMNH 36788, 36789), all mist-netted at Hanggud Tubig, Mt Madja-as between 8 and 11 April 1992 at 1,040 to 1,329 m elevation. This winter migrant has been recorded from Luzon to Mindanao and Palawan and usually occurs in forest edge in small to large flocks.

MOUNTAIN LEAF-WARBLER *Phylloscopus trivirgatus nigrorum*

Specimen records 58 (25 NMP, 24 CMNH, 9 not designated) all mist-netted from mid-mountain to montane mossy forest on Mt Baloy and Mt Madja-as. From 21 February to 6 March 1987 Sison and Pelayo obtained the first 3 specimens (NMP 16316, 16357, 16359) at *c.* 1,000 m from Mt Baloy.

During the 1989 survey of Mt Baloy, we obtained 12 specimens from 7 to 13 October, only from Camp 2 at *c.* 1,530 m elevation. Like the White-browed Shortwing and Island Thrush, no Mountain Leaf-Warblers were captured on the lower slopes between 770 and 975 m at Camp 3, but they were seen above Camp 2 to the peak of Mt Baloy at 1,910 m. Only 1 of 9 males was in breeding condition with testes slightly enlarged (4.0 x 1.0 mm). None of the 3 females appeared to be in breeding condition.

On Mt Madja-as from 5 to 26 April 1992, we mist-netted 43 birds at Hanggud Tubig and Nalanaw between 1,050 and 1,500 m with only 1 bird captured below 1,100 m. Birds were fairly evenly distributed above 1,100 m with 17 captured in 29 nets

(capture/mist net ratio = 0.59) between 1,100 and 1,349 m and 25 captured in 39 nets (capture/mist net ratio = 0.64) between 1,350 and 1,570 m. Of 16 males sexed, 15 had enlarged testes ranging from 3 x 2 to 7 x 5 mm, the other was a juvenile with no skull ossification. Of 8 females, 6 appeared to be in breeding condition with ovaries measuring 5 x 3 to 7 x 6 mm, while 2 had small ovaries measuring 4 x 3.

We compared the plumage of the Panay birds with that of a series (n=8, CMNH, NMP) from Mt Kanla-on on Negros and concluded that, aside from individual variation, both populations are the same and belong to *P. t. nigrorum*.

WHITE-THROATED JUNGLE-FLYCATCHER *Rhinomyias albigularis*

Specimen records 7, 6 mist-netted, 1 caught in a mammal snap trap: 2 males (NMP 18939, CMNH 34265) on 3 October 1989 at Camp 1, Mt Baloy at 210 m, both with small testes measuring 3 x 1 mm; 1 female (NMP 16700) on 15 October 1989, and 1 female (CMNH 34266) on 16 October, both at Camp 3, Mt Baloy at 950 m, with undeveloped ovaries and skull ossification from 50 to 75%; 2 males on 8 April 1992 at Hanggud Tubig, Mt Madja-as at about 1,000 m, 1 (CMNH 36798) with slightly enlarged testes measuring 3 x 3 mm and 1 male (NMP 18930) with enlarged testes measuring 12 x 6 mm; and 1 male (CMNH 36930) on 28 April 1992 from the Alojipan DENR Nursery at 80 m with enlarged testes measuring 9.5 x 4.5 mm. We have compared these 7 specimens with 2 males, 2 females (FMNH) from Negros and found only individual and overlapping differences in plumage and measurements among the birds from the two islands. This Philippine endemic was previously known only from Negros and Guimaras, and appears to be uncommon on Panay in lowland to middle elevation forest and patches of forest.

FERRUGINOUS FLYCATCHER *Muscicapa ferruginea*

Specimen record, 1 immature male (NMP 16693) with spotted crown, mist-netted in montane mossy forest at Camp 2 on Mt Baloy at 1,530 m on 13 October 1989. This rare migrant has previously been recorded in the Philippines only from Luzon, Mindoro, Palawan and Sibutu.

SNOWY-BROWED FLYCATCHER *Ficedula hyperythra* subsp.

Specimen records 56 (30 NMP, 22 CMNH, 4 not designated) all mist-netted in mid-mountain to montane mossy forest. Sison and Pelayo obtained 11 (8 males, 3 females) specimens from 17 February to 5 March 1987, all from *c.* 1,000 m on Mt Baloy. The birds were generally not in breeding condition yet 3 males had slightly developed testes judging from drawings on the labels.

On Mt Baloy in 1989, we obtained 12 specimens from 7 to 16 October, 8 at 1,530 m from Camp 2, and 4 at 950 m from Camp 3. Of 10 birds sexed, none was in breeding condition.

During the 1992 survey of Mt Madja-as, we obtained 33 specimens (2 with no altitudinal data) from 5 to 25 April with an altitudinal range from 1,095 to 1,570 m. We found that they were unevenly distributed within this range with 16 captured in 21

mist nets (capture/mist net ratio = 0.76) between 1,095 and 1,223 m and 15 captured in 39 mist nets (capture/mist net ratio = 0.38) between 1,352 and 1,570 m. None was captured in 11 mist nets between 1,240 and 1,350 m. Of 22 birds sexed, 15 were males all with enlarged testes ranging from 5 x 3 to 8 x 4.5 mm, and 7 were females with ovaries ranging from 5 x 3 to 7 x 4 mm. Despite the relatively small size of the ovaries, the birds were apparently in breeding condition as one ovary contained 2 corpora lutea and a slightly enlarged ovum measuring 2 x 2 mm.

Snowy-browed Flycatchers are widespread and common in mid-mountain and montane forests throughout the Philippines and 8 endemic subspecies have been described. We have yet to determine the subspecific status of the Panay population.

PECHORA PIPIT *Anthus gustavi gustavi*

Specimen records 5, all mist-netted: 2 males in 1989 at Camp 3, Mt Baloy from 950 to 975 m elevation in mid-mountain forest on 16 (NMP 18940) and 17 (CMNH 34287) October; and 3 males in 1992 from the Alojipan DENR Nursery in the foothills of Mt Madja-as from 80 to 95 m elevation on 28 April (NMP 18978, CMNH 36935) and 1 May (CMNH 36936).

The Pechora Pipit is an uncommon migrant throughout most of the Philippines, including Panay.

FIRE-BREASTED FLOWERPECKER *Dicaeum ignipectus* subsp.

Specimen record, 1 male (CMNH 36815) in breeding condition with testes measuring 5 x 4 mm, mist-netted at Hanggud Tubig, Mt Madja-as in mid-mountain forest at 1,137 m on 8 April 1992. This species appears to be uncommon to rare in the mountains of western Panay.

Three endemic subspecies of the Fire-breasted Flowerpecker are known in the Philippines, patchily recorded from montane forests of Luzon, Samar, Mindanao and Negros. We have yet to determine the subspecific status of this specimen, but suspect it will be similar to the subspecies *D. i. apo*, from Negros.

MOUNTAIN WHITE-EYE *Zosterops montanus* subsp.

Specimen records 24 (11 NMP, 13 CMNH) all mist-netted in mid-mountain to montane mossy forest. Sison and Pelayo obtained the first specimen, a female (NMP 16330) on Mt Baloy on 13 February 1987 at *c.* 1,000 m elevation. The NMP/CMNH Biodiversity Team did not obtain any specimens on Mt Baloy in 1989 but Kennedy and Ebreo saw them in small flocks or mixed flocks in the canopy of montane mossy forest at Camp 2 from 1,430 m to the peak of Mt Baloy at 1,910 m.

On Mt Madja-as, we obtained 23 specimens between 5 and 25 April 1992 from both Hanggud Tubig and Nalanaw. Aside from 10 birds caught between 1,100 and 1,137 m, they were fairly evenly distributed in elevation from 1,000 to 1,430 m, but none was caught in the 14 nets above this elevation. These birds tend to be more canopy oriented, particularly in mossy forest, and this may explain why we did not catch them on Mt Baloy or on the higher slopes of Mt Madja-as. Of 17 birds sexed on

Mt Madja-as, 10 were males in breeding condition with gonads measuring from 6 x 5 to 8 x 6 mm, and 7 were females, 4 adults with gonads measuring 5 x 3 to 6.5 x 5 mm (the largest with 1 corpus luteum and largest ovum 1.5 mm) and 3 juveniles with gonads measuring 2 x 1 to 5 x 4 mm and skull ossification 70% or less.

The Mountain White-eye is a common resident in the mid-mountain and montane forests of Panay. We have compared the plumage of the Panay population to 8 specimens (CMNH) of *Z. m. pectoralis* from Negros and 3 specimens (CMNH) of *Z. m. halconensis* from Mindoro. The taxonomic status of the Panay population is uncertain as they do not appear to belong to either of the above subspecies. This problem will be addressed in a future paper.

TAWNY-BREASTED PARROTFINCH *Erythrura hyperythra brunneiventris*
Specimen record, 1 male (CMNH 36820) in breeding condition with testes measuring 4 x 4 mm, mist-netted at Hanggud Tubig, Mt Madja-as in montane forest at 1,245 m on 8 April 1992. Previously recorded in the Philippines only from Luzon and Mindoro, this species appears to be rare in the mountains of western Panay.

WHITE-CHEEKED BULLFINCH *Pyrrhula leucogenis* subsp.
Specimen record, 1 male (CMNH 36899) with moderately enlarged testes measuring 3 x 2.5 mm, mist-netted at Nalanaw, Mt Madja-as in montane mossy forest at 1,392 m on 21 April 1992. This unique specimen differs in several ways from the other known subspecies of this endemic Philippine species from Luzon (*P. l. leucogenis*) and from Mindanao (*P. l. steerei*). The presence of this species on Panay adds credence to a record (questioned and not accepted by Dickinson *et al.* 1991) of an immature specimen (AMNH 714669) reported to be from Mindoro.

Acknowledgements

We are indebted to C. R. Cox whose efforts paved the way for our Panay work. In the Department of Natural Resources (DENR), we are grateful for the generous help and assistance of Protected Areas and Wildlife Bureau Directors Dr. Corazon Catibog-Sinha and Wilfrido S. Pollisco and their diligent staff, and the DENR staff in Iloilo, particularly Carlos J. Magno, Roben Calbo and Samson Guillergan. The untiring efforts of our field colleagues R. Aquino, R. Brown, D. Burt, D. Busemeyer, J. Demboski, J. Cabalquinto, E. Cañada, P. Comintan, R. Fernandez, J. Ferner, D. Gonzales, A. Ippolito, D. Keller, J. Lasugas, M. Manuel, L. Moores, M. Pakaigue, M. Pelayo, T. Ramos, G. Rivera, L. Ruedas, J. Ruthven, E. Sagcal, V. Samarita, J. Senires and of our numerous assistants in Valderrama and Culasi, are greatly appreciated. We thank G. Hess of the Delaware Museum of Natural History (DMNH), D. Willard of the Field Museum of Natural History (FMNH), M. LeCroy of the American Museum of Natural History (AMNH) and the curators and collections staff at the National Museum of Natural History (USNM) for loans of specimens and permission to study specimens in their care. E. C. Dickinson kindly read earlier drafts of this paper and offered much encouragement for its publication, and M. P. Walters assisted our attempt to locate a published record of the nest of the Sunda Ground-Thrush. For their generous hospitality towards one or several of the field teams in Panay or in Manila, we are particularly grateful to Rob & Karen Arras, Lynn Butler, Joan & Tom Hubbard, Boyet & Marilou Maquad, the Miranda family, Mary & Mike Stephen and Bob & Ann-Marie Tate. Finally, the NMP/CMNH Biodiversity Surveys of Panay were made possible through the generosity of Mrs. E. Farny, Mr. & Mrs. J. A.

D. Geier, Mr. & Mrs. J. Herron, Mr. & Mrs. G. Perbix and Mrs. G. Strietmann, by equipment support from Outdoor Adventures and by a grant from the John D. and Catherine T. MacArthur Foundation awarded to Gonzales and Kennedy. This is contribution No. 25 of the NMP/CMNH Philippine Biodiversity Inventory.

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